

Date: Wednesday, 12/5/2007 10:24:41 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SHUT-OFF VALVE SHAFT
Job Number	: 36125		
Estimate Number	: 12180		
P.O. Number	: N/A	Part Number	: D34705
This Issue	: 12/5/2007 S.O. No. : N/A	Drawing Number	: D3470 REV.A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: A
Previous Run	: 34411	Material	: N/A
Written By	: <u>12/07/05</u>	Due Date	: 12/12/2007
Checked & Approved By	: <u>12/07/05</u>	Qty:	13 Um: Each
Comment	: est rev A 06.04.20 new issue EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M304S26GA	304/316 0.018 SHEET
-----	-----------	---------------------



8528



Comment: Qty.: 0.0656 sf(s)/Unit Total : 0.6563 sf(s)  
 304/316 0.018 SHEET Batch: 105591 12-07-12-7

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET  
 Cut as per Dwg D3470  
 Dwg Rev: A  
 Prog Rev: A

12-07-12-7

13

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

6/12/10 (x13) center

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1  
 Deburr if necessary.

mf

07-12-10

13

6.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

6/12/10 (x13)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: PD Date: 01/12/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Wednesday, 12/5/2007 10:24:41 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHUT-OFF VALVE SHAFT

Job Number: 36125

Part Number: D34705

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

mf

07-12-10

(13)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



(13)

Comment: FINAL INSPECTION/W/O RELEASE

DA/12/11

Job Completion



run 2007/12/11 cy

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

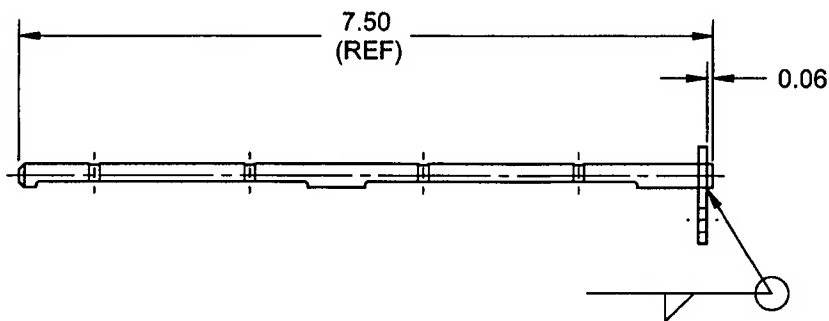
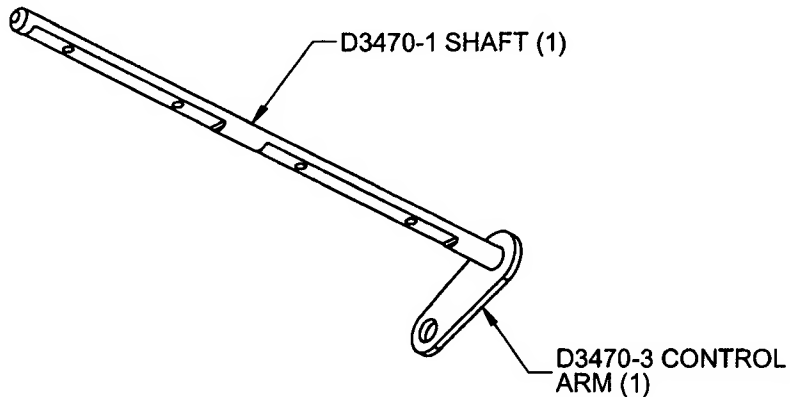
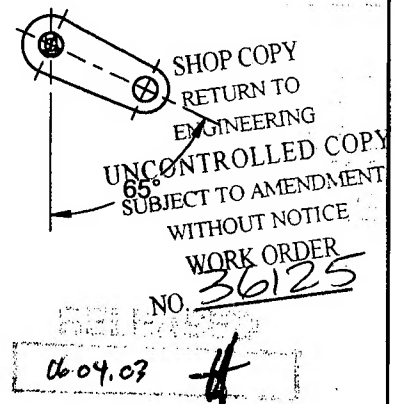
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3470</b>	REV. A SHEET 1 OF 4
DATE <b>05.12.14</b>		TITLE <b>SHUT-OFF VALVE SHAFT</b>	SCALE 1:2
A	05.12.14	NEW ISSUE	

**D3470-041 SHUT-OFF VALVE SHAFT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3470-041	SHUT-OFF VALVE SHAFT
1	D3470-1	SHAFT
1	D3470-3	CONTROL ARM

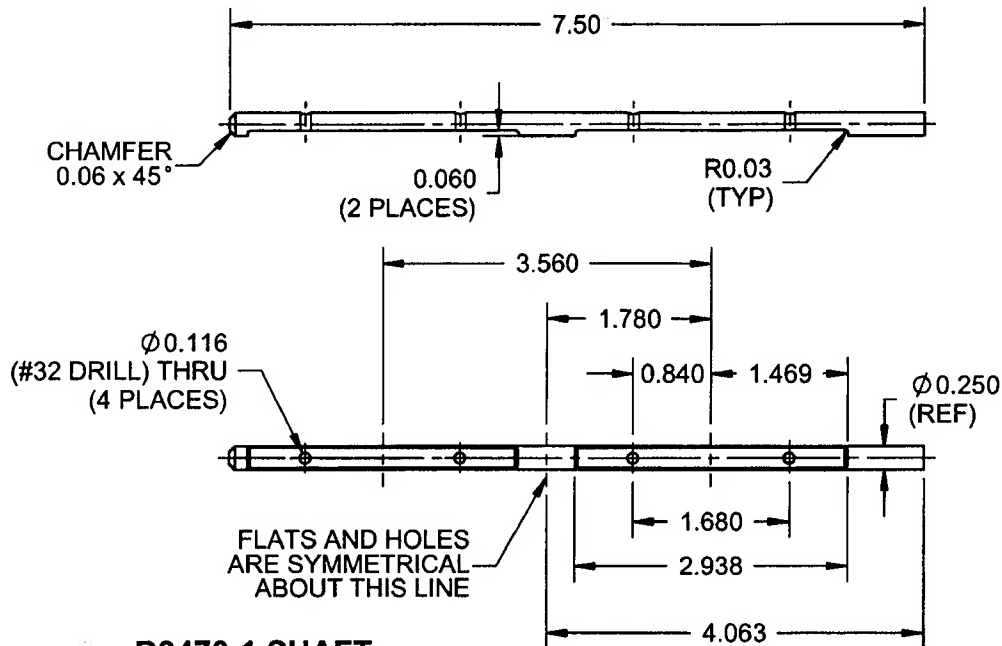
**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

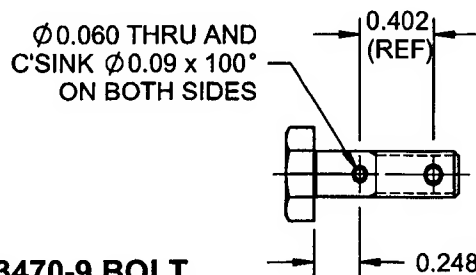


**DART**

DESIGN <i>B</i>	DRAWN BY <i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. <b>D3470</b>	REV. A SHEET 2 OF 4
DATE <b>05.12.14</b>		TITLE <b>SHUT-OFF VALVE SHAFT</b>	SCALE 1:2

**D3470-1 SHAFT**

- 1) MATERIAL: AISI 303 STAINLESS STEEL 0.25 ROUND BAR  
(REF. DART SPEC. M303R0.250)

**D3470-9 BOLT**  
SCALE 1:1

- 1) MAKE FROM AN4-6 BOLT

**NOTES:**

- 2) FINISH: NONE  
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 36125



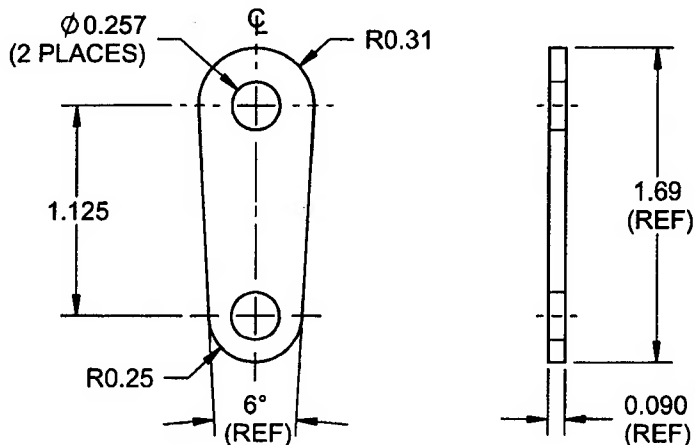


**DART**

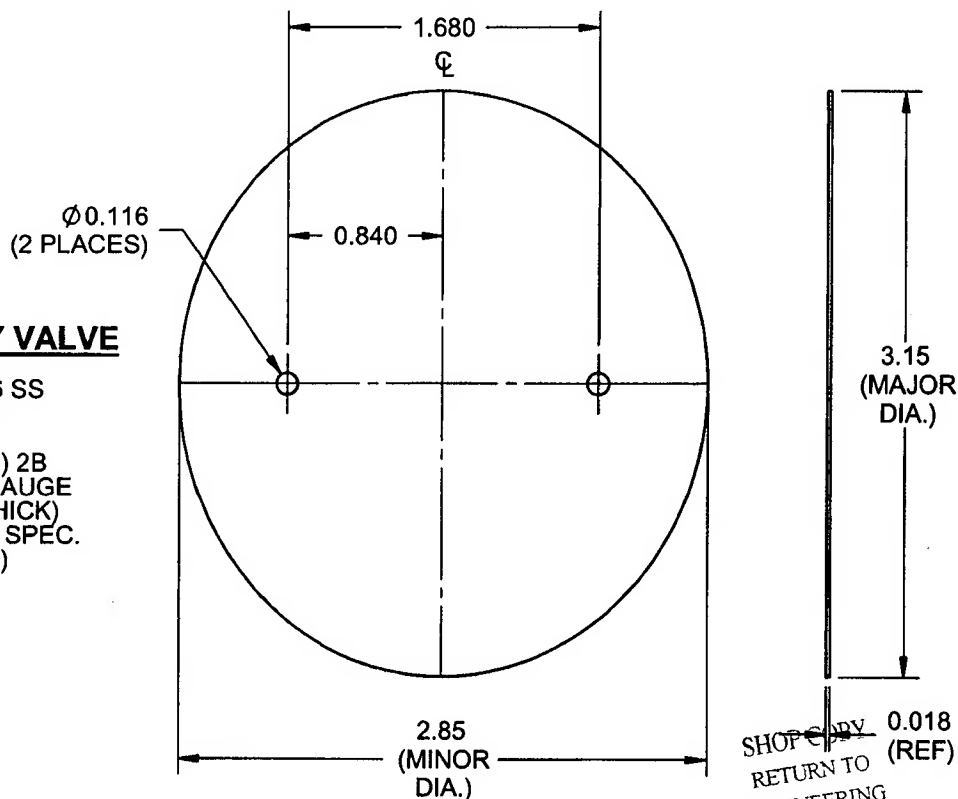
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3470</b>	REV. A SHEET 3 OF 4
DATE <b>05.12.14</b>		TITLE <b>SHUT-OFF VALVE SHAFT</b>	
		SCALE 1:1	

**D3470-3 CONTROL ARM**

- 1) MATERIAL: AISI 304/316 SS SHEET PER  
MIL-S-5019 (ANNEALED) 2B  
FINISH 13 GAUGE SS  
(0.090 THICK)  
(REF. DART SPEC. M304S13GA)

**D3470-5 BUTTERFLY VALVE**

- 1) MATERIAL: AISI 304/316 SS  
SHEET PER  
MIL-S-5019  
(ANNEALED) 2B  
FINISH 26 GAUGE  
SS (0.018 THICK)  
(REF. DART SPEC.  
M304S26GA)

**NOTES:**

- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

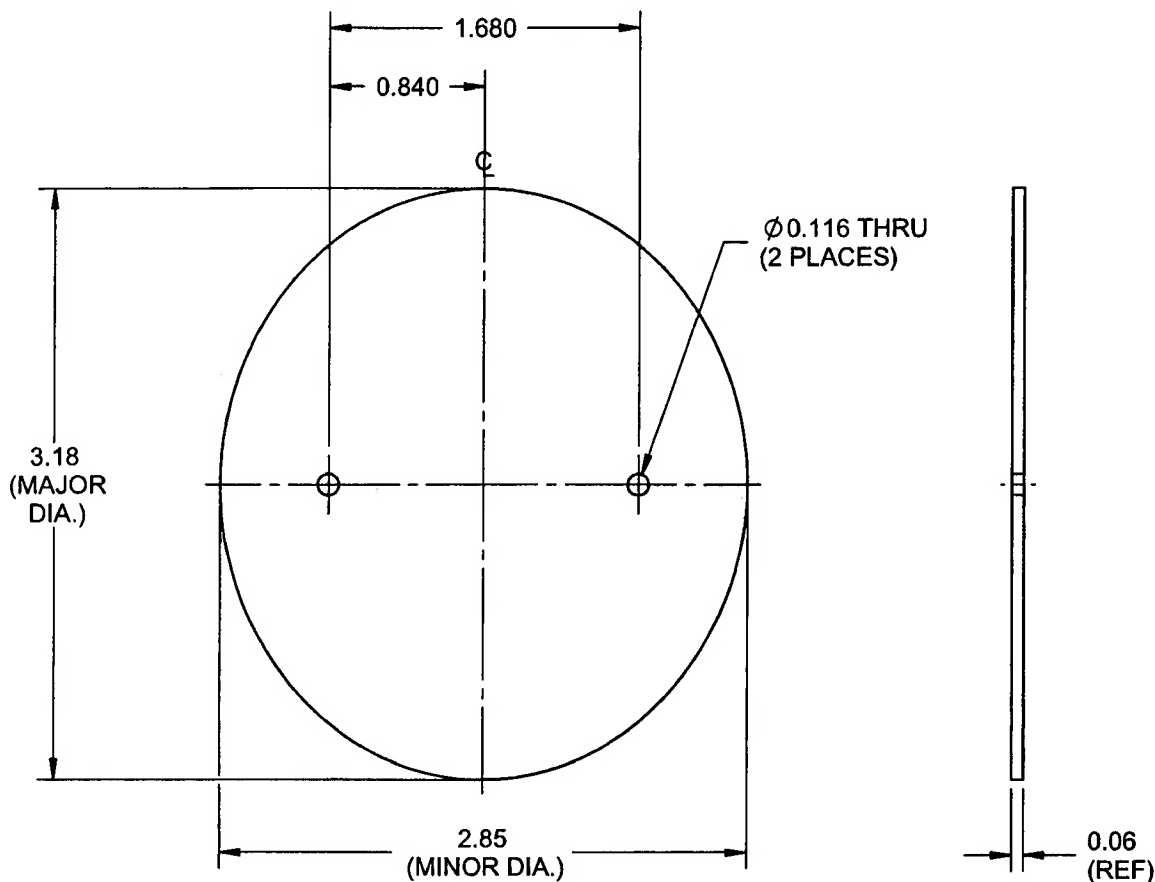
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **36125**

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3470	REV. A SHEET 4 OF 4
DATE 05.12.14		TITLE SHUT-OFF VALVE SHAFT	SCALE 1:1



### D3470-7 BUTTERFLY VALVE SEAL

#### NOTES:

- 1) MATERIAL: RED (OR GRAY) 60 DUROMETER HI-TEMPERATURE SILICONE SHEET, 0.063 THICK (REF. DART SPEC. M-SIL60-S.063)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

RELEASED  
06.04.03 *[Signature]*

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 36125

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



